

CLAIMS

What is claimed is:

1. A skin tanning chamber, the improvement comprising at least one light emitting diode emitting a UVA light.
2. The skin tanning chamber of Claim 1 wherein the LED emits essentially only UVA light.
3. The skin tanning chamber of Claim 1 wherein the chamber is a bed or booth.
4. The skin tanning chamber of Claim 1 wherein the LED is incorporated into a flexible form.
5. The skin tanning chamber of Claim 1 wherein the LED is incorporated into a garment or cloth.
6. The skin tanning chamber of Claim 1 further comprising at least one LED emitting a UVB and/or a UVC light.
7. The skin tanning chamber of Claim 6 wherein the LED emitting the UVA light is under independent control from the LED emitting UVC light.
8. The skin tanning chamber of Claim 1 the improvement comprising a plurality of LEDs emitting UVA light.
9. The skin tanning chamber of Claim 8 further comprising a means for controlling the electric current to each LED to maintain a constant total radiant flux over the life time of each LED.

10. The skin tanning chamber of Claim 8 further comprising a means for controlling the LEDs to allow radiation to selected portions of the skin.
- 5 11. The skin tanning chamber of Claim 8 further comprising a means for controlling the period of exposure.
12. The skin tanning chamber of Claim 11 further comprising a means for storing records of use.
- 10 13. The skin tanning chamber of Claim 1 wherein the LED is incorporated into a form which is adapted to fit into a standard fluorescent bulb fixture.
14. The skin tanning chamber of Claim 13 wherein the form further comprises an
15 internal power converter.
15. The skin tanning chamber of Claim 1 wherein the LEDs are ventilated.
16. The skin tanning chamber of Claim 15 wherein the LEDs are ventilated by a fan
20 directing air longitudinally across the LEDs.
17. The skin tanning chamber of Claim 16 wherein the LEDs are disposed within a transparent tube characterized by one or more perforations which provide for air flow out of the tube.
- 25 18. The skin tanning chamber of Claim 17 wherein the tube is characterized by a closed end and an open end, wherein the air is directed through the open end and out the perforations.

19. The skin tanning chamber of Claim 18 wherein the density of perforations on the distal end of the tube, with respect to the open end, is greater than the density of perforations on the proximal end.
- 5 20. The skin tanning chamber of Claim 18 wherein the perforations on the distal end of the tube, with respect to the open end, are larger than the perforations on the proximal end.
21. The skin tanning chamber of Claim 18 comprising a bed and a circuit board
10 characterized by an array of UVA LEDs.
22. The skin tanning chamber of Claim 21 wherein the circuit board is selected from the group consisting of (a) rigid, (b) curved, and (c) flexible.